

# Hypothyroidism-Related Eye Bulging May Prove Evolutionary Basis of Link Between Enlarged Eyes and Promiscuous Reproductive Strategy in Females

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## Introduction

Perhaps you have seen the recent television advertisements concerning treatments for a condition referred to as Thyroid Eye Disease. The tendency of the eyes to maintain relatively high intraocular pressure (leading to exaggerated size) can be caused by the presence (or the absence of) certain types of mRNA secreted by the thyroid.

## Abstract

Even in an individual with normal thyroid function, under conditions of starvation, thyroid function decreases in order to bring about lower metabolic function; increasing the chances of survival for a starving person.

What survival benefit then, does larger ocular size bestow upon a human being? For males, there seems to be no benefit. For females, larger ocular size is correlated with promiscuity. Some females alternate conditionally between single and extra-pair copulation. In early human development, with food being scarce, females experiencing starvation would have been in that situation as the result either of being entirely unpaired; with no one to provide food for them; or of being paired to mates that could not provide sufficiently. The conditional enlargement of the eyes would have both served to complement a promiscuous reproductive strategy and would have enhanced perceived attractiveness.

This would be an example of natural selection at work. While baseline ocular size is genetically determined, the idea that the short-term malleability of ocular size is in and of itself evolutionary is quite a new concept.

## Conclusion

If increased intraocular pressure indirectly increases the chances of survival for females during conditions of starvation, it makes sense that this is the default reaction of ocular tissue to decreases in thyroid activity regardless of cause. It could be further deduced that the male perception of large eyes being attractive is genetically bestowed and is to blame for the familiar and burdensome reality of males being subconsciously and irrationally guided to mate with likely-promiscuous women.